

You are cordially invited to attend the
MSU Mathematics Education Colloquium

Wednesday, November 14, 2012
3:30 – 5 p.m., 252 Erickson Hall, MSU



Presented by:

Karen King
NCTM

Discussant:
Alicia Alonzo
Dept. of Teacher Education

Measuring Teachers' Use of Standards-based Instructional Materials

Calls for research on curriculum in mathematics education have included the recommendation that studies include systematic data collection on the fidelity of curriculum implementation (Confrey & Stohl, 2004). At the same time, there is little consensus on what fidelity of curricular implementation is and how to operationalize the construct for data collection (Chval, et al., 2008; Huntley, 2009). This research symposium is to explore a method used to study curriculum implementation and the implications of measurement choices for explaining student achievement. In the Teachers' Use of Standards-based Instructional Materials project, we sought to understand when teachers use and adapt the district-adopted instructional materials for their purposes, and the impact of this use and adaptation on the desired outcome, student learning of mathematics. Using HLM, the analysis explores the ways in which two different surveys allow for similar and differing explanations of teachers' enacted curriculum and its relationship to student learning as measured by state tests.

Karen D. King, Ph.D., is transitioning to become Program Director at the National Science Foundation in the Division of Research on Learning in Formal and Informal Settings in the Education and Human Resources Directorate. She most recently served as Director of Research for the National Council of Teachers of Mathematics, the largest professional association of mathematics teachers in the world, serving the US and Canada. King's current research focuses on urban mathematics reform, the mathematics preparation of elementary and secondary teachers, and the policies of mathematics teacher professional development. She has been the principal investigator or co-principal investigator of National Science Foundation funded grants totaling over \$2,000,000 and recently co-edited a book titled *Disrupting Tradition: Research and Practice Pathways in Mathematics Education* with William Tate, IV and Celia Rousseau Anderson. She also serves as part of the writing team for the revision of *The Mathematical Education of Teachers*, which describes the mathematics teachers need to know and be able to do to be successful in light of the Common Core State Standards in Mathematics.

King has served as associate editor of the *Journal for Research in Mathematics Education* and was a member of the RAND Mathematics Study Panel, which made recommendations to the U.S. Department of Education about future research funding in mathematics education. She received a Ph.D. in 1997 at the University of Maryland, where she conducted research on mathematics teacher thinking. She also serves on numerous committees focusing on research in mathematics education and teacher education with national organizations.

The Program in Mathematics Education sponsors this event.